

Remarks:

Reconsideration of the application is requested.

Claims 1-14 remain in the application. Claims 1, 2 and 8 have been amended. No new matter has been added. Claims 9-14 are withdrawn from consideration.

In item 4 on page 2 of the Office action, claims 1, 3 and 5 have been rejected as being fully anticipated by Brettschuh et al (SWR 1000) (hereinafter, "Brettschuh") under 35 U.S.C. § 102.

In item 5 on page 3 of the Office action, claims 1, 3, 5 and 7 have been rejected as being fully anticipated by Gluntz (EP 0 620 560 A1) under 35 U.S.C. § 102.

In item 6 on page 4 of the Office action, claims 2, 4, 6 and 8 have been rejected as being fully anticipated by Gamble (U.S. Pat. No. 6,069,930) under 35 U.S.C. § 102.

The rejections have been noted and the claims have been amended in an effort to even more clearly define the invention of the instant application. Support for the changes is found at page 6, second paragraph to page 9, second paragraph of the specification. See also original claim 8.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia, a containment vessel of a nuclear power plant, comprising:

a pressure chamber disposed in said interior space, said pressure chamber having a top region;

a condenser communicating with said pressure chamber through a flow path;

a condensing pipe leading into said condensing chamber; and

a drain pipe for noncondensable gases, said drain pipe disposed in said interior space and fluidically connecting said top region of said pressure chamber to said condensing chamber, said drain pipe defining a direct connection to said condensing chamber, and said drain pipe not connected to said condenser. (Emphasis added.)

Accordingly, in the *present invention*, a drain pipe (22) is provided which connects the top region in a containment vessel (1) to a condensing chamber (4) arranged in the containment vessel (1) in order to draw off noncondensable gases from the

surroundings of a building condenser (16) in the containment vessel (1) of a boiling-water nuclear power plant. Thus, the reliability of performance of the building condenser (16) is maintained. The noncondensable gases flow automatically into the condensing chamber (4) via the drain pipe. As a result, the building condenser (16) can be made simple and cost-effective.

In other words, in the *present invention*, the critical advantage of the drain pipe is that a collection of gases which cannot be condensed **in or at** the condenser are avoided. Thus, the condenser has a very high grade of efficiency. See page 6, second paragraph to page 9, second paragraph of the specification of the instant application.

Such a simple drain pipe without the interposition of a condenser cannot be found from Brettschuh, Gluntz or Gamble. Although Gluntz or Gamble may contain flow connections between the pressure chamber and the condenser chamber, they must each lead across a condenser. See Fig. 1; col. 5, line 31 to col. 6, line 16, Gluntz. See also Fig. 1; col. 3, lines 29 to 44, Gamble.

Applicant further points out that Gluntz as well as Gamble pertain to the same cooling system (of General Electric) in principle. This system does not teach or suggest the

disclosed feature of the *present invention* according to which the gases that cannot be condensed are drawn off directly and immediately from the drain pipe.

Moreover, the *present invention* includes a condensing pipe, in addition to the drain pipe. Applicant submits that such a configuration cannot be found from Brettschuh, Gluntz or Gamble.

Clearly, the references do not show "a pressure chamber disposed in said interior space, said pressure chamber having a top region; a condenser communicating with said pressure chamber through a flow path; a condensing pipe leading into said condensing chamber; and a drain pipe for noncondensable gases, said drain pipe disposed in said interior space and fluidically connecting said top region of said pressure chamber to said condensing chamber, a drain pipe for noncondensable gases, said drain pipe disposed in said interior space and fluidically connecting said top region of said pressure chamber to said condensing chamber, said drain pipe defining a direct connection to said condensing chamber, and said drain pipe not connected to said condenser", as recited in claim 1 of the instant application (emphasis added). Thus, neither can the specific combination of the aforementioned limitations be shown. Claim 2 recites similar limitations.

In other words, the features including the limitations "a pressure chamber disposed in said interior space, said pressure chamber having a top region; a condenser communicating with said pressure chamber through a flow path; a condensing pipe leading into said condensing chamber; and a drain pipe for noncondensable gases, said drain pipe disposed in said interior space and fluidically connecting said top region of said pressure chamber to said condensing chamber, a drain pipe for noncondensable gases, said drain pipe disposed in said interior space and fluidically connecting said top region of said pressure chamber to said condensing chamber, said drain pipe defining a direct connection to said condensing chamber, and said drain pipe not connected to said condenser," as recited in claim 1, attain the present invention's objectives and are not taught or suggested by the references, whether taken alone or in any combination (emphasis added).

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1 or 2. Claims 1 and 2 are, therefore, believed to be patentable over the art and since the dependent claims 3-10 are ultimately dependent on claim 1 or 2, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-14 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, the Examiner is respectfully requested to telephone counsel so that, if possible, patentable language can be worked out.

Please charge any fees which might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

  
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For Applicant

VRP:cgm

Ven R. Ponugoti

Reg. No.51,052

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Lerner and Greenberg, P.A.

Post Office Box 2480

Hollywood, FL 33022-2480

Tel: (954) 925-1100

Fax: (954) 925-1101

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the claims:

Claim 1 (amended). A containment vessel of a nuclear power plant, comprising:

an interior space;

a condensing chamber disposed in said interior space;

a pressure chamber disposed in said interior space, said pressure chamber having a top region;

a condenser communicating with said pressure chamber through a flow path; [and]

a condensing pipe leading into said condensing chamber; and

a drain pipe for noncondensable gases, said drain pipe disposed in said interior space and fluidically connecting said top region of said pressure chamber to said condensing chamber, said drain pipe defining a direct connection to said

condensing chamber, and said drain pipe not connected to said condenser.

Claim 2 (amended). A containment vessel of a nuclear power plant, comprising:

an interior space;

a condensing chamber disposed in said interior space;

a pressure chamber disposed in said interior space;

a condenser disposed in said pressure chamber and defining a region around said condenser; [and]

a condensing pipe leading into said condensing chamber; and

a drain pipe for noncondensable gases, said drain pipe fluidically connecting said region around said condenser to said condensing chamber, and said drain pipe having a top end disposed above said condenser, and said drain pipe defining a direct connection to said condensing chamber, and said drain pipe not connected to said condenser.



Claim 8 (amended). The containment vessel according to claim 6, wherein [including a] said condensing pipe [leading into said condensing chamber and ending] ends below said bottom end of said drain pipe.